

PSYCHOLOGY INFORMATION FOR STUDENTS

NO.7 - MARCH 2007

1. What Really Happened: The Case Study of H.M
2. Treating Sex Offenders: A Brief Introduction to
Behavioural and Cognitive-Behavioural Treatments

ISSN: 1743-3851

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What Really Happened: The Case Study of H.M

INTRODUCTION

Since becoming amnesic in 1953, H.M has been studied by nearly one hundred different investigators, mainly from the Montreal Neurological Institute and Massachusetts Institute of Technology (Corkin 2002). The case study being most widely reported as Scoville and Milner (1957) ⁽¹⁾.

The research on H.M uses the case study method. This is concerned with collecting large amounts of information about the subject of the study, who, in this this case, is an individual.

Table 1 gives the main advantages and disadvantages of the case study method as used with H.M.

ADVANTAGES	DISADVANTAGES
- Builds up detailed picture (H.M studied for over 50 years) - Studying unusual may help to understand usual - Insight gained from focusing on one example - Documents rare or outstanding cases - Tentative support for theory or challenge orthodox view	- Not possible to generalise findings because based upon one person - Little information about H.M before his operation (ie no baseline for comparison of post-operation findings) - Variables not controlled as in experiment (though H.M took part in memory experiments) - Information based on subjective view of observer/ researcher

Table 1 - Main advantages and disadvantages of the case study method as used with H.M.

BACKGROUND

H.M (or Henry M) was born in 1926 in Manchester, Connecticut, USA (<http://en.wikipedia.org/wiki/HM>; accessed 02/02/07) (Box 1).

He suffered from minor epileptic fits from age 10, and these became more severe from age sixteen. This led to the experimental surgery by William Beecher Scoville on the medial temporal lobe (MTL). This surgery was a bilateral MTL resection (8 cm long) on 1st September 1953 at Hartford Hospital in Hartford, Connecticut. It involved the removal of approximately two-thirds of the MTL on both sides of the brain, which included the hippocampus and amygdala ⁽²⁾.

There was a family history of epilepsy, as well as H.M sustaining a head injury at nine years old from falling off his bike. He was unconscious for five minutes, and suffered laceration of the left supra-orbital region (Scoville and Milner 1957).

The surgery reduced the number of major seizures to approximately two per year, but produced severe anterograde amnesia ⁽³⁾. In simple terms, he had no long-term memory after the operation. It was also later discovered that he had some retrograde amnesia ⁽⁴⁾ (ie: memory problems for eleven years before operation) (Sagar et al 1985).

Milner (1966) described H.M after the operation:

The patient was drowsy for the first few postoperative days but then, as he became more alert, a severe memory impairment was apparent. He could no longer recognise the hospital staff ...and he seemed to retain nothing of the day-to-day happenings in the hospital (p112).

Born: 1926

Head injury: 9 years old

Fits begin: 10 years old (minor);
16 years old (severe)

Operation: 1st September 1953

Scoville and Milner psychological
examination: 26th April 1955

Evidence of post-operation
memory: 1962 procedural learning (Milner);
1966 draw plan of house moved into after
operation (Corkin)

Box 1 - Key dates in life and research on H.M.

SCOVILLE AND MILNER (1957)

This article gave details of the operation upon H.M, and another patient, performed by Scoville, and compared them to eight similar patients.

The destruction of part of the brain was commonly used at the time as treatment for psychosis. But H.M's operation was still experimental (in terms of use for epilepsy): "This frankly experimental operation was considered justifiable because the patient was totally incapacitated by his seizures and these had proven refractory to a medical approach" (p11).

The memory loss after the operation was unexpected for the surgeon. H.M was described thus: "to a casual observer this man seems like a relatively normal individual, since his understanding and reasoning are undiminished", but he "has even eaten luncheon in front of one of us... without being able to name, a mere half-hour later, a single item of food he had eaten; in fact, he could not remember having eaten luncheon at all" (p14).

Case Studies

H.M was a motor winder with an IQ of 112 post-operation on the Weschler-Bellevue Intelligence Scale, and 104 pre-operation. The difference being an improvement in arithmetic. The frequency and severity of the epileptic seizures meant that he was unable to work. The bilateral MTL resection was "from the midpoints of the tips of the temporal lobes, with the temporal horns constituting the lateral edges of resection" (p16) ⁽⁵⁾. The methods used were not that sophisticated including the drilling of 3.8 cm holes in the skull (Scoville et al 1953).

Scovill and Milner performed a psychological examination on 26 April 1955. H.M was twenty-nine years old at this point, and it was over 2 years after the operation.

H.M gave the date as March 1953 and his age as 27. "In conversation, he reverted constantly to boyhood events and seemed scarcely to realize that he had had an operation" (p16). On the Weschler Memory Scale, he scored sixty-seven (very low). Corkin et al (1997) recorded a score of 73 in 1992.

Scoville and Milner reported nine other cases of similar operations, but not all of them had severe memory loss like H.M. Two other patients had memory scores similar to H.M and they had undergone similar size removals of the MTL (ie: 8 cm). The other patients who had moderate memory problems (five of them) or none at all (two) had less brain area removed (eg: 5 cm) (table 2).

The authors concluded that the hippocampus was important for normal memory function because the removal of other areas of the temporal lobe (eg: amygdala) does not cause memory impairment. The size of the amount of brain removed was also important ⁽⁶⁾.

FINDINGS ON MEMORY FROM STUDYING H.M

Scoville and Milner (1957) linked H.M's amnesia to

the removal of part of the hippocampus. They were among the first to make this link.

Research on H.M, over the years, has concentrated upon a number of questions about memory, and some of the initial conclusions have been challenged: for example, that the hippocampus was the site of the long-term memory. It is now felt that the hippocampus is where memories are formed (physiologically), and then transferred over several days to the "cerebral cortical storage system" (Murphy and Naish 2004).

CASE STUDY	AMOUNT OF MEDIAL TEMPORAL LOBE REMOVED (cm)	WECHSLER MEMORY SCORE
Severe memory loss		
H.M	8	67
D.C	5.5	70
M.B	8	60
Moderate memory loss		
A.Z	5	84
M.R	5	81
A.R	4.5	)incomplete data
C.G	5.5	)
A.L	6	)
No memory loss		
I.S	4	125
E.G	9*	90

(* right side removed only)

(After Scoville and Milner 1957)

Table 2 - Case studies quoted in Scoville and Milner (1957).

i) Was the amnesia evident irrelevant of the type of memory test (eg: free recall or recognition), the stimulus material (eg: word or digit), and the senses used (eg: viewing or listening to stimulus material)? (7)

The answer, after many different researchers have tested all of these elements, is yes (Corkin 2002). H.M has no long-term memory after the operation: both forms of declarative memory (8) - episodic and semantic. For example, H.M cannot remember the meaning of new words learnt after the operation.

ii) What memory abilities are still intact?

H.M's short-term memory appears to be in full working order. While extensive studies by Milner et al

(1968) felt that his comprehension of language is "undisturbed". Corkin (1984) did challenge this, by suggesting he had a "mild language disorder", but this "might have preceded the brain operation" (Corkin 2002).

Recent research by Kensinger et al (2001), on his lexical memory (9) and grammatical processing, found normal scores for his age and education level. Corkin et al (1997) argued that any language problems could be due to additional damage to the MTL in the lateral temporal neocortex.

iii) Can H.M learn anything?

Despite the memory problems mentioned above, Brenda Milner in 1962 (Corkin 2002) was the first to report evidence of learning by H.M on a mirror-tracing task. This task involves tracing a picture of a star from the reflection in a mirror, where left and right are reversed. Generally individuals improve on this task with practice. H.M showed such improvement, but had no conscious recall or recognition of ever having done the task before. Any improvements lasted as long as a year (Corkin 2002). These findings showed that the acquisition and retention of skills is in another part of the brain than the MTL.

But his performance on a maze did not improve even after 215 trials (compared to the seventeen trials needed by healthy volunteers to learn the route) (Milner 1965). This task is more of a pure memory task than the mirror-tracing one.

Another area of learning where H.M showed some normal progress is known as priming repetition. This is tested by giving participants a stimulus to study (eg: list of words), and later word stems, for example, to complete. The previous stimulus will influence the subsequent task, but unconsciously. For example, reading about lighting devices will influence the word stem "CAN" to be completed as "candle" more often than "cannot", "canned", or "cannery".

H.M has the normal abilities for word-stem completion with familiar words, but not unfamiliar words (Postle and Corkin 1998).

Postle and Corkin devised a word-stem completion task for H.M using words that had entered the dictionary after 1965 (ie: after H.M's operation). H.M was asked to read aloud each word on a computer screen, and then one minute later to complete a three-letter word stem with the first word that came to mind. He tended to complete the word stems using words learnt pre-operation rather than the new words just read. For example, H.M read the new word "fractal", and then later given the word stem "FRA". Non-amnesic participants usually give "fractal",

while H.M was more likely to choose another word like "fraud" (Corkin 2002).

iv) Was there evidence of new memories after the operation?

Corkin (2002) reported, from her extensive work with H.M, evidence of topographical memory (10) (or personal semantic memory) formed after the operation. In 1958 (five years after the operation), H.M and his parents moved to a new house in Connecticut (where he lived until 1974). In 1966, he was able to draw an accurate floor plan of the house. Asked, in 1976, to do the same thing, he again drew an accurate plan of this house not the new one where he was now living with his mother and another relative.

Corkin (2002) felt that his recall of the house plan was because of the information "being learned slowly over an extensive period of time, presumably with the support of cortical structures" (p156). In other words, H.M had constructed a cognitive map of the house's layout. McNaughton et al (1991) proposed that spatial processing involves a number of areas of the brain, of which most were intact in H.M (eg: area 7 of the posterior parietal cortex).

Another contrary finding for H.M was his normal ability to recognise coloured magazine pictures (seen for twenty seconds) at ten minutes, 24 hours, 72 hours, one week, and six months (Freed and Corkin 1988). This ability is familiarity judgement rather than recall, and uses other parts of the brain again (eg: perirhinal cortex).

Kensinger and Corkin (2000) tested H.M on recognition of famous faces from the 1920s to 1980s. The task was to name the face, the reason for their fame, and their decade. For pre-operation faces (1920s and 30s), H.M was significantly better than healthy volunteers, and significantly worse for the 1950s onwards (post-operation). Concentrating on the later faces, H.M was given extra cues:

a) Semantic information about the face; eg: President of USA. This did not improve recognition scores;

b) Phonemic cues (eg: initials). H.M's naming of faces did improve (though still below that of healthy volunteers), but not their reason for fame or decade. Thus H.M did have some semantic memory, even if poor, for the post-operation period.

v) Does H.M have a sense of self?

The assumption is that the sense of self is based upon memory. So no memory means no sense of self. But H.M has childhood memories as well as some "meagre conscious recollections of information encountered postoperatively" (Corkin 2002). Admittedly the childhood memories were limited to facts (semantic memory) rather than episodic memory storytelling.

The sense of self also includes beliefs, desires and values which H.M has, including definite views on right and wrong (Corkin 2002). Though he cannot recognise photographs of himself post-operation, H.M has some awareness of his condition, as shown by this exchange with Suzanne Corkin:

When I asked him, "What do you do to try to remember? he replied, "well, that I don't know 'cause I don't remember (laugh) what I tried" (Corkin 2002 p158).

One issue of the self relates to the question of what does he see when he looks in the mirror. Corkin (2002) reported, that despite his lack of knowledge of his age, H.M does not seem shocked at his appearance in the mirror. The reason being that an intact part of the brain is daily updating his feeling of familiarity for the face in the mirror (11).

CONCLUSIONS

H.M has been studied for over fifty years, and is one of the most famous case studies in psychology. "Sadly, however, he will remain unaware of his fame and of the impact that his part in research has had on science and medical communities internationally" (Corkin 2002 p159).

The most outstanding finding on memory from the years of study is that memory is made up of many different types which use different areas of the brain (either alone or in combination). There is no simple situation of memory/amnesia (no memory).

Table 3 summarises H.M's memory abilities.

Overall any memories that H.M retained were either encoded pre-operation, or abilities post-operation that used other parts of the brain than or as well as the MTL.

Into the 21st century and H.M was living in a nursing home in Hartford, and still took part in memory testing. "He enjoys doing crossword puzzles and watching

detective shows on television. His life is peaceful, if not completely happy" (Schaffhausen no date).

TYPES OF MEMORY/ABILITY	FINDINGS
Anterograde amnesia	No memory since operation
Retrograde amnesia	Memory problems for 11 years before operation
Episodic memory	None after operation; limited before
Semantic memory	None after operation; good for pre-operation information even after fifty years
Short-term memory	Working normally
Language comprehension	Generally unaffected, except for new words learnt after operation (no recall)
Procedural learning	Able to learn some tasks (eg mirror-tracing) even with no conscious memory of doing so
Repetition priming	Normal for pre-operation words
Topographical memory	Limited amount of learning after operation
Recognition of magazine pictures	Normal ability
Famous face recognition	Normal for pre-operation faces, but some very limited knowledge for post-operation faces

Table 3 - Memory abilities of H.M

FOOTNOTES

1. Scoville had made a brief reference to the case study at a meeting of the Harvey Cushing Society in 1953 (Corkin 2002), and in the Journal of Neurosurgery 1954.
2. The remaining area atrophied, and there was damage to the anterolateral temporal cortex (<http://en.wikipedia.org/wiki/HM>; accessed 02/02/07). Corkin et al (1997) reported atrophy in the cerebellum area, but this could have been the side effect of long term use of "Dilantin" (antiepileptic drug phenytoin).
3. Anterograde amnesia is "an inability to learn new information after some trauma" (Medin et al 2001).
4. Retrograde amnesia is "a loss of memory for events that occurred prior to some trauma" (Medin et al 2001).

5. The first MRI scans in 1997 showed damage less than Scoville estimated (Corkin 2002).

6. The bilateral amygdalectomy (removal of the amygdala on both sides of the brain) led to a reduced ability for H.M to report pain, hunger and thirst (Corkin 2002).

7. Different ways of testing memory:

- Type of memory test: free or cued recall; multiple choice or yes/no recognition.
- Stimulus material: words, digits, pseudowords, faces, shapes, paragraphs, sounds, public events, personal events.
- Senses used: visual, auditory, olfaction, somatosensory.

8. Declarative memory (Cohen 1984) is the "knowledge of factual information, including both episodic and semantic information, 'knowing that'" (Medin et al 2001). Episodic memory refers to "memory for autobiographical events, including the context (time, place, setting) in which they occurred" (Medin et al 2001). While semantic memory describes the "memory for general knowledge of the world and language: the type of knowledge often found in encyclopaedias and dictionaries but not knowledge about particular events" (Medin et al 2001).

Declarative memory contrasts with procedural learning (non-declarative memory), which involves memory for skills ("knowing how"), and are not easy to verbalise.

9. Lexical memory is the term for the memory for words as used in language.

10. Topographical memory is spatial memory (eg: as used in maps; Kinnear and Wood 1987).

11. Information processing models of face recognition (eg: Young et al 1985) allowed for separate stages in recognition including feeling of familiarity and retrieving semantic information about the face.

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Article written February 2007

Treating Sex Offenders: A Brief Introduction to Behavioural and Cognitive-Behavioural Treatments

INTRODUCTION

Sexual offenders are a group of offenders where a lot of effort has been targeted to try and change their behaviour rather than simply imprison them without help. The main areas of sexual offences include rape, paedophilia (a sexual interest in children), and indecent exposure (exhibitionism). Table 1 gives a more comprehensive list.

SEXUAL OFFENCE	CONTACT (C)/ NON-CONTACT (N)	COVERT (C)/ OVERT (O)
Exhibitionism/public masturbation	N	C
Voyeurism	N	C
Obscene phone calls	N	C
Frotteurism	C	C
Physical violence inc rape (acquaintance, stranger, date, marital, attempted); mutilation	C	O
Sexual murder, attempted, serial	C	O
Necrophilia	C	C
Paedophilia	C	O
Stalking	N	C
Sexual harassment	verbal N	O
	physical C	O

(After Carich and Calder 2003)

Table 1 - Sexual offences.

As well as many different types of offences, the offenders themselves are heterogeneous; based on victim type and selection, arousal, social skills, lifestyle, personality, motivation, and general criminal characteristics (Carich and Calder 2003). Table 2 summarises some of the main typologies of sex offenders.

Key aspects of distinguishing sex offenders from these typologies includes the degree of social competence, and fixation, which will affect the success (and motivation) of treatment.

NAME	TYPOLGY
Groth (1982) Regressed/ fixated *; types of rapist	Regressed offenders - offend in later life, and can be viewed as situational; eg: sexual attraction to child precipitated by stress Fixated offender - lifestyle and history of offending 3 types of rapist - anger rape (hurt victim); power rape (exercise dominance); sadistic rape (torture victim)
Canter & Heritage (1990) types of rapist based on how victim treated	Victim as person (rape seen as "normal" sexual behaviour by offender); victim as object (controlling victim); victim as vehicle (violence which demeans victim)
Knight & Prentky (1990) 9 types of rapist; axis 1 & 2 *	Rapists - eg: type 1 (opportunist, high social competence), type 7 (sexual non-sadistic, low social competence) Axis 1 (4 types) sexual deviance; Axis 2 (6 types) social competence
Lanning (1992) FBI *	Situational types - regressed (eg: low self-esteem), morally indiscriminate (eg: general pattern of abusive behaviour), sexually indiscriminate (eg: sexual experimenter), inadequate (eg: "social misfit") Preferential types - seducer (eg: use of gifts), introverted (eg: lacks social skills), sadistic
Freeman- Longo & Blanchard (1998) preferential/ situational *	Preferential offender - chronic long-term offender Situational offender - similar to regressed Groth
Campbell et al (2000) (quoted in Carich & Calder 2003) 5 factor model *	Type 1 - regressed offender: primary incest Type 2 - situational/opportunistic to offend Type 3 - chronic offender: "negative lifestyle", personality disorder Type 4 - extreme hard core: high psychopathy index Type 5 - mentally disturbed offender

(* = child sex offenders)

Table 2 - Types of sex offender.

Any treatment programme must address the individual's whole life. For example, denial of the offence is often the first hurdle. Based on the work of Prentky (1995), there are six target areas for treatment:

1. Impaired adult relationships
2. Lack of empathy
3. Anger
4. Cognitive distortions
5. Deviant sexual arousal
6. Anti-social personality ⁽¹⁾

The sex offender treatment programme (SOTP) was introduced in twenty-five prisons in England and Wales in 1992 based on a multi-modal approach (Stone et al 2000). However, it did not exclude individuals with mental illness, high risk of self-harm, severe paranoid personality disorder, low intelligence (IQ of below 80), or those with organic brain damage.

BEHAVIOURAL TECHNIQUES

Behavioural techniques can be used to discourage the sexual arousal at, for example, photographs of children. There are a variety of techniques based on the principles of classical and operant conditioning. The main principle is that deviant behaviour is learnt, and so it is a question of unlearning it and learning an appropriate behaviour.

Classical conditioning is where two events become associated together and is based on the work of Ivan Pavlov. Operant conditioning comes from the work of B.F. Skinner and concentrates on learning based on the reward and punishment of past behaviour (known as stimulus-response).

Sometimes these are called behaviour modification techniques. Maletsky (1991) listed three groups of techniques (table 3).

Here are some of the main behaviour modification techniques:

i) Aversion therapy (conditioned aversion)

This is the pairing of an unpleasant stimulus (eg: noxious smell) with the fantasy object (Laws et al 1978). In time, this unpleasant association will reduce the strength of the arousal to the fantasy object.

But it is unlikely to be long lasting if the individual has no other sexual outlet (Grubin et al 1993).

AVERSION TECHNIQUES	RECONDITIONING	POSITIVE CONDITIONING
- covert aversive conditioning	- fading	- desensitization
- overt aversion conditioning	- plethysmographic biofeedback (shaping)	- success imagery
- electric stimulation	- masturbatory satiation	- orgasmic conditioning
- odour aversion	- masturbatory fantasy change	- olfactory conditioning
- shame therapy		- amyl nitrate enhancement
- negative practice	- masturbatory conditioning	

(After Grubin et al 1993)

Table 3 - Behaviour modification techniques for sex offenders.

ii) Covert sensitization (or aversive conditioning)

This involves imagining the worse consequences of the deviant behaviour (eg: public humiliation and imprisonment)(Cautela and Wisocki 1971), and hopefully this association will build up, as with aversion therapy, to stop the behaviour.

It is based on self-administration of aversive exercises (Grubin et al 1992). In one case, an exhibitionist carried a card with details of the awful consequences of the behaviour, and this reduced offending by 25% (Marshall et al 1991).

Shaming is similar. The individual is required to describe (or perform) their sexual fantasy before a critical audience (Jones and Frei 1977).

iii) Satiation

This technique is based upon the individual being forced to continue in their deviant behaviour until they become sick of it. Again hoping the unpleasant association will build up. One example used is masturbatory satiation (Abel et al 1984).

iv) Fantasy modification (or orgasmic reconditioning)

These involve slowly building up the association of the orgasm with an appropriate stimulus. The aim is to replace the inappropriate stimulus or fantasy object with an appropriate one (Marquis 1990).

A variation of this is known as fading. The offender is asked to masturbate to a slide of their fantasy, which is slowly superimposed by a more acceptable image at the

point of orgasm. While in shaping, the individual is rewarded for sexual arousal to appropriate targets.

Controversially, Quinn et al (1970) used a cool drink as reward with a dehydrated offender.

Problems

Behaviour modification techniques suffer from a number of weaknesses, which tend to be the weaknesses of behaviour therapies generally:

a) The problem of generalising the changes from therapy to real-life and/or complex situations;

b) Playing down or ignoring the cognitive aspects of sexual offending. In other words, how the individual thinks about the offending behaviour, and makes sense of it (eg: the belief that "she was asking for it" in rape cases). This problem is confronted by cognitive-behavioural therapy (CBT);

c) Many of the techniques have ethical concerns, for example, in deliberately inducing nausea or the use of mild electric shocks in aversion therapy in the past. Often offenders are not in a position to give their free consent to such programmes because refusal could lead to longer sentences in prison.

Furthermore, "the public have difficulty accepting why pornographic material should be shown to sex offenders, even if it is part of their assessment and treatment" (Stone et al 2000).

COGNITIVE-BEHAVIOURAL THERAPY

In concentrating upon the cognitive elements of offending, CBT deals with aspects of behaviour like motivation, cognitive distortions, and denials (2).

Beckett et al (1994) described the STEP project which combines a number of treatment strategies:

i) Dealing with the offence cycle

A pattern can be found leading up to the offence, and strategies for dealing with it developed. This forces offenders to acknowledge their responsibility, and to stop the use of the denial of "it just happened".

ii) Challenging distorted thinking

Many offenders hold attitudes that justify their behaviour, so it is necessary to challenge these with

factual information. For example, rapists often argue that the victims enjoy the rape really. This can be challenged with the use of the painful testimonies of rape victims.

Blumenthal et al (1999) compared two groups of offenders - one child sexual offenders, the others adults. They were studied on measures of cognitive distortion relating to sex and rape, and attributions of the cause of crime. The child sexual offenders showed cognitive distortions about sex with children, like "children enjoy it really" or "it is a way of adults showing they love the child", but not about rape. The adult sex offenders made more external attributions (ie: they blamed the victim).

Abel et al (1984) listed four key cognitive distortions of child sex offenders:

- A child who does not physically resist the adult's sexual advances really wants them;
- Sex with children is a good way of teaching children about sex;
- A child who does not disclose to others about incest is really enjoying it and wants it;
- A child who asks an adult questions about sex is really asking for sex.

The basis of most sexual offences is a set of beliefs about the world. For example, the belief that a man who buys dinner for a woman should have the right to have sex with that woman ⁽³⁾. Group therapy has been used to get offenders to challenge each other's cognitive distortions ⁽⁴⁾. Sometimes called reattributional training (Beckett 1994).

Sykes and Matza (1957) proposed five techniques of neutralisation that allows offenders generally to deny that their actions are wrong or harmful:

- Denial of responsibility (eg: blame upbringing);
- Denial of injury of victim (eg: "nobody really got hurt");
- Denial of victim (eg: victim deserved it);
- Condemnation of condemners (eg: criticise authorities);
- Appeal to higher loyalties (eg: peer group).

Mezey et al (1991), working with male convicted child sex offenders, found evidence of common and deeply ingrained denials (table 4).

The Abel and Becker cognitions scale (Abel and Becker 1984) is commonly used to measure distorted thinking with items like "Some time in the future our

DENIAL	EXAMPLES
Denial of act	Deny offence; claim victim older; admit to "socially acceptable" version like incest with daughter rather than son; aberration - eg: "penis just slipped in" or "normal heterosexual male" who allowed child to tempt him into incest
Denial of child	Child as "object" or physical attributes (actual name rarely used)
Denial of child as victim	Offender sees themselves as victim; eg: seduced by three year-old
Denial of responsibility	Blame child or other adults in family for not stopping it
Denial of consequence for child	Trivialised; eg: "not that bad"
Denial of consequence of offence	Deny to be continuing risk to child; eg: one man believed he would be reunited with his daughters (victims) after prison sentence

Table 4 - Forms of denial used by child sex offenders.

society will realise that sex between a child and an adult is all right".

iii) Understanding the harm done to the victim

A lack of feeling for the victim can be addressed by role playing a victim. It is important to overcome the denial of pain made by the offender.

But there are warnings that humiliating offenders if this is taken too far could increase (rather than decrease) the risk of offending (Stone et al 2000).

iv) Fantasy modification

Howitt (2004) explored the possible roles of fantasy in sex offending:

- Fantasy as a blueprint for offending;
- As rehearsal for offending;
- As a means of sexual arousal;
- Fantasy and offending having common origins;
- Fantasy enhancement and renewal as the cause of offending.

Also whether fantasy is different between offenders and non-offenders.

v) Social skills and anger control

Many paedophiles have difficulties with adult relationships, so social skills training may be helpful here.

Anger control programmes are helpful when aggression and anger are part of the offence (eg: with rape). Originally developed by Novaco (1975), anger control programmes tend to have three stages:

- Cognitive preparation (factors that cause the anger);
- Skill acquisition (skills to deal with anger);
- Application practice.

vi) Relapse prevention work

Learning to recognise high risk factors for re-offending.

Problems

a) CBT does depend on the individual being able to reflect on his or her own thinking. For severe problems it is not possible to use this approach to help the person (Brewer 2001);

b) Often it does not look at the underlying cause or origin of the behaviour.

CONCLUSIONS

Do these programmes work? The limited number of studies performed do suggest that any treatment is better than none. For example, Marshall et al (1991) followed two groups of released sex offenders over a five year period. Up to 60% of the untreated group re-offended compared to 15% of the treated group.

Beckett et al (1994) reviewed a number of community based programmes in England. Overall half of the offenders showed some "treatment effects" (ie: improvements in behaviour). Short-term programmes (of less than sixty hours) were successful because the men were less deviant and more willing to admit their offences, while long-term programmes are better for more deviant offenders.

Table 5 includes some of the recent studies on the effectiveness of treatment programmes.

STUDY	DETAILS
Hanson and Bussiere (1998)	CBT in Canadian correctional institution with six year follow-up: recidivism reduced from 33% to 14%
Alexander (1999)	meta-analysis of 79 studies with over 11 000 participants: recidivism of 9.4% for treatment in prison, 16.6% for treatment in hospital settings, 11.5% for outpatient clinics compared to 17.6% for untreated participants; overall re-arrest rate of 14.4% for treatment and 25.8% for no treatment (Molett et al 2001)
Marshall et al (1999)	12 programmes: eight showed significant improvements; four of no value
Weiss (1999) (quoted in Lehne et al 2000)	Twenty-five year assessment of treatments in Czech Republic (and Czechoslovakia): 17.1% recidivism
Hanson et al (2002)	meta-analysis of 43 studies for sex offenders: 12.3% sex offence recidivism (treatment) vs 16.8% (no treatment) over forty-six months average follow-up; 27.9% vs 39.2% for general recidivism; CBT 9.9% vs 17.4% sexual recidivism, 32% vs 51% general recidivism; older treatments (pre-1980) little effect

Table 5 - Studies on effectiveness of treatment programmes for sex offenders.

Whether individuals change or not will depend upon a number of factors including the short-term and long-term consequences (Briggs 1994) (table 6).

Generally among the public, the attitude towards treatment is that it is an "easy option" compared to straight imprisonment. But Carich and Calder (2003) refuted this view:

We believe that although treatment is costly the decision not to treat can be more costly emotionally and psychologically for the offender, for the victims and the future victims, and for society (p49).

SHORT-TERM CONSEQUENCES		LONG-TERM CONSEQUENCES	
POSITIVE REASONS	NEGATIVE REASONS	POSITIVE REASONS	NEGATIVE REASONS
MOTIVATIONS TO CHANGE			
to please staff	scared of failure	get out of prison	stop doing what like
MOTIVATIONS NOT TO CHANGE			
avoid hard work	staff pressure	keep doing risky behaviour	always be watched by authorities

(After Briggs 1994)

Table 6 - Motivations for changing or not in offender programmes.

FOOTNOTES

1. Anti-social personality disorder is "A pervasive pattern of disregard for, and violation of, the rights of others that begins in childhood or early adolescence and continues into adulthood" (APA 1994 p645).

2. Abel and Osborn (1996) listed the components of cognitive-behavioural programmes. Table 7 gives the top ten components in order of importance.

1. Victim empathy (included in 97% of programmes)
2. Dealing with cognitive distortions (95%)
3. Anger/aggression management (91%)
4. Sex education (90%)
5. Relapse prevention (89%)
6. Communication skills (89%)
7. Assertiveness training (87%)
8. Dealing with relapse cycle (87%)
9. Reality of personal victimization trauma (80%)
10. Dealing with pre-assault/assault cycle (78%)

Table 7 - Top ten components of cognitive-behavioural programmes.

3. Disturbingly, some studies have found little difference between the views of some male undergraduates and convicted rapists. For example, coerced sexual intercourse not perceived as offence if: there is a history of sex between the couple, the woman returns to the man's house, or the woman asks the man out (Brewer 2000).

4. Clark and Erooga (1994) listed the phases of group therapy: denial and resistance; guilt and false motivation to change; awareness but resistance to change; awareness and internalisation; and awareness and acceptance of responsibility.

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APPENDIX: RESTORATIVE JUSTICE AND SHAMING

Restorative justice is a relatively new concept, and is "a process whereby all the parties with a stake in a particular offence come together to resolve collectively how to deal with the aftermath of the offence and its implications for the future" (Marshall 1999 p5). So rather than punishing an offender with imprisonment, it forces them to face the victim, and to become responsible for the consequences of the offence. "It views crime not as a violation of a general legal category but as harm to individual people and relationships and, as the term suggests, seeks to redress or restore that harm" (McAlinden 2005 p375). Restorative justice is not without controversy.

Howley (2002) reported the use of restorative justice generally in Bougainville (south-east Asia) after the civil war in the 1990s. Howley highlighted the difference between restorative justice, which encourages "confession, honesty and sincerity because of a desire to completely and properly end the matter", and punitive justice which "in the court encourages concealing and distorting the truth out of fear of punishment and the need to be victorious". Shaming was a key aspect of restorative justice here.

McAlinden (2005) applied the concept of shaming to use with sex offenders. Here she made the distinction between "disintegrative" and "reintegrative shaming". The former is characterised by newspaper campaigns, like the "News of the World" in July 2000, to publicly name paedophiles, and may, in fact, increase recidivism through stigmatisation and vigilante attacks. While "reintegrative shaming" is more positive because it involves the shame of people that matter most to the offender (Braithwaite 1993). This type of shaming makes use of circles of support, and accountability by the offender.

McAlinden (2005) concluded that, with reservations like the type of offender, "reintegrative shaming" schemes could prove beneficial "for improving the safety of victims, for providing relief for communities and for rehabilitating offenders.." (p388)

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Article written December 2005

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ISSN: 1743-3851

Published twice per year: March/September

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